

Biodiversity Enhancement Specification - Condition 12

Stonehouse Park

9th December 2023

Report Number. LB328/R01



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Section 1: Introduction

- 1.1. Laird bailey Ltd has been instructed by Staitech Ltd (the applicant) to prepare and submit a Biodiversity Enhancement Specification (BES) to satisfy the requirements of Condition 12 of the Full Planning Permission (FDP) for the Development (App No, S.23/0943/FUL) at Stonehouse Park, Sperry Way, Stonehouse, Gloucestershire.
- 1.2. The FDP granted permission for a new development comprising a *“New manufacturing facility (Use Classes E(g)and B8) together with access, parking, landscaping and associated infrastructure”*.
- 1.3. Condition 12 states: *Within 3 months of commencement, a specification (including methodology and programme of implementation) for the enhancement of biodiversity through the provision of bird and bat boxes, hedgerow and wildflower planting shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved specification and programme of implementation and be retained thereafter. Reason: To protect and enhance the site for biodiversity in accordance with paragraph 175 of the National Planning Policy Framework, Policy ES6 of the Stroud District Local Plan 2015 and in order for the Council to comply with Section 40 of the Natural Environment and Rural Communities Act 2006.*
- 1.4. In accordance with the above condition, this BES sets out the specification of the following items along with implementation and management operations and timings:
 - Bird and bat boxes;
 - Proposed Hedgerow planting;
 - Proposed Wildflower planting; and
 - Existing Trees.

Phasing

- 1.5. The implementation of approved landscape proposals will take place following the completion of the built development so as to avoid damage to newly planted features by plant machinery. All planting is to be undertaken within the next available planting season in line with timings set out herein.



Section 2: Landscape Specification and Management Operations

Q30

Seeding/ turfing

General information/requirements

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Evenly and without displacing seed, seedlings or soil.
3. **Frequency:** As necessary to ensure the establishment and continued thriving of all seeding/turf.

150 Water restrictions

Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

160 Notice

1. **Give notice before**
 - 1.1 Setting out.
 - 1.2 Applying herbicide.
 - 1.3 Applying fertilizer.
 - 1.4 Preparing seed bed.
 - 1.5 Seeding or turfing.
 - 1.6 Visiting site during maintenance period.
2. **Period of notice:** 3 working days.

170 Setting out

1. **Boundaries:** Mark clearly.
2. **Delineation:** In straight lines or smoothly flowing curves as shown on drawings.

Preparation

210 Herbicide

1. **Description:** FOR WILDFLOWER MEADOWS.
2. **Usage:** Do not use.

250 Soil requirements

1. **Type** All planting.



11. **Seeded areas:** Existing Topsoil and subsoil.
12. **Hedgerows:** Existing Topsoil and subsoil.

Seeding

312 Wildflower seed mixture

1. **Description:** Proposed Shade Tolerant Wildflower Grassland Mix.
2. **Supplier:** Emorsgate.
 - 2.1. **Mixture reference:** EH1 Hedgerow Mixture.
3. **Application rate:** 4 g/m².

322 Quality of wildflower seed

1. **Description:** FOR WILDFLOWER MEADOWS.
2. **Standard:** In accordance with Flora Locale's 'Code of practice for collectors, growers and suppliers of native flora'.
3. **Germination testing:** Not required
4. **Freshness of seed:** Produced for the current growing season.
5. **Samples:** Submit when requested.

330 Sowing

1. **General:** Establish good seed contact with the root zone.
2. **Method:** To suit soil type, proposed usage, location and weather conditions during and after sowing.
 - 2.1. **Distribution:** 2 equal sowings at right angles to each other and diagonally to main axis.

336 Wildflower sowing season

1. **Wildflower seed generally:** March to May or August to October.

352 Edges to seeded areas

1. **Description:** HARD LANDSCAPING.
2. **Timing:** After seeded areas are well established.
3. **Edges:** Clean straight lines or smooth curves.
 - 3.1. **Mulch and soil:** Draw back to permit edging.
4. **Arisings:** Remove.
5. **Completion:** Respread soil and mulch.

Protecting/cutting

540 First cut of Wildflower Meadows Year 1

1. **Description:** First Year Management: Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. Resist cutting the annual weeds until mid to late summer. Then cut, remove and compost. This will reveal the young meadow, which can then be kept short by mowing



through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

2. **Height of initial growth:** N/a.
3. **Debris and litter:** Remove.
 - 3.1. **Stones and earth clods larger than 25 mm in any dimension:** Remove.
4. **Height of first cut:** 50 mm.
5. **Mower type:** Contractor's choice.
6. **Arisings:** Remove from site.

Maintenance

610 Failures of seeding/ turfing

1. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. **Defective materials or workmanship:** Areas that have failed to thrive.
 - 2.1. **Exclusions:** Theft or malicious damage.
3. **Method of making good:** Recultivation and reseeded/ returfing.
4. **Timing of making good:** The next suitable planting season.

650 Maintaining grassed areas with wildflowers Year 2+

1. **Description:** Management Once Established. Cut back meadow grassland adjacent to hedgerow and scrub once a year. Cutting should be done on a rotational basis so no more than half the area is cut in any one year leaving part as an undisturbed refuge. Cut the meadow peripheries to maintain a neat edge along access paths in line with the amenity grassland maintenance schedule, the meadow should be cut in a way to create a scalloped edge to enhance habitat diversity.
2. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
3. **Preparation:** Before each cut remove all litter and debris.
4. **Height and frequency of cut in second growing season**
 - 4.1. **Time of cut:** Single cut in October.
 - 4.2. **Height of cut:** 50 mm.
5. **Trimming:** All edges.
 - 5.1. **Arisings:** Let sit for up to 7 days to drop seed and then remove.
6. **Watering:** Contractor's choice.

Ω End of Section

Q31

External planting

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.



2. **Stones:** Remove those with any dimension exceeding 50 mm.
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. **Vegetation:** Retain and protect trees and scrub along northern boundary indicated on drawings.
5. **Large roots:** Leave in situ.

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged.
2. **Frozen or snow-covered soil:** Do not plant into frozen soils.

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.
 - 1.1 **Strong winds:** Do not plant.

125 Times of year for planting

1. **Deciduous trees and shrubs:** Late October to late March.
2. **Container grown plants:** At any time if ground and weather conditions are favorable.
 - 2.1 **Watering and weed control:** Provide as necessary to ensure healthy establishment.

130 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Evenly and without damaging or displacing plants or soil.
3. **Frequency:** As necessary to ensure establishment and continued thriving of planting.

150 Water restrictions

1. **General:** If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.

160 Notice

1. **Give notice before**
 - 1.1 Setting out.
 - 1.2 Applying herbicide.
 - 1.3 Applying fertilizer.
 - 1.4 Delivery of plants/ trees.
 - 1.5 Planting shrubs.
 - 1.6 Planting trees into pre- dug pits.
 - 1.7 Watering.
 - 1.8 Visiting site during maintenance period.



2. **Period of notice:** Three working days.

170 Soil requirements

1. Type
 11. **Planting beds:** Existing topsoil and subsoil.
 12. **Tree pits, shrub pits and other backfilling:** Existing topsoil.
 13. **External container planting:** Existing topsoil.
 14. **Mulch applied after planting:** Mulching and top dressing 75mm depth organic bark mulch.

200 Plants/ Trees –general

1. **Condition:** Materially undamaged, sturdy, healthy and vigorous.
2. **Appearance:** Of good shape and without elongated shoots.
3. **Hardiness:** Grown in a suitable environment and hardened off.
4. **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
5. **Budded or grafted plants:** Bottom worked.
6. **Root system and condition:** Balanced with branch system.
 - 6.1. **Standard:** The National Plant Specification.
7. **Species:** True to name.
8. **Origin/ Provenance:** British provenance.
9. **Definition:** Origin and Provenance have the meaning given in the National Plant Specification.

216 Plants/ Trees –specification criteria

1. **Name, forms, dimensions and other criteria:** To the relevant part of BS 3936.

245 Labelling and information

1. **General:** Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:
 - 1.1 Full botanical name.
 - 1.2 Total number.
 - 1.3 Number of bundles.
 - 1.4 Part bundles.
 - 1.5 Supplier's name.
 - 1.6 Employer's name and project reference.
 - 1.7 Plant specification, in accordance with scheduled National Plant Specification categories.
2. **Additional information:** Submit on request: Nursery origin.

246 Labelling and information

1. **Standard:** To BS 3936.



260 Plant/ Tree substitution

1. **Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering:** Submit alternatives, stating:
 - 1.1 Price.
 - 1.2 Difference from specified plants/ trees.
2. **Approval:** Obtain before making any substitution.

265 Plant handling, storage transport and planting

1. **Standard:** To CPSE 'Handling and establishing landscape plants'.
2. **Frost:** Protect plants from frost.
3. **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. **Plant packaging:** Coextruded polyethylene bags with black interior and white exterior.
5. **Packaging of bulk quantities:** Pallets or bins sealed with polyethylene and shrink wrapped.
6. **Planting:** Upright or well balanced with best side to front.

285 Protection of existing grass

1. **General:** Protect areas affected by planting operations using boards/ tarpaulins.
 - 1.1 **Excavated or imported material:** Do not place directly on grass.
 - 1.2 **Duration:** Minimum period.

290 Surplus material

1. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove and dispose of at licensed waste transfer facility.

Planting shrubs/ herbaceous plants/ bulbs

471 Naturalized hedges

1. **Planting:** In trenches large enough to take full spread of roots. Set out plants evenly.

480 After planting

1. **Watering:** Immediately after planting, thoroughly and without damaging or displacing plants or soil.
2. **Firming:** Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
3. **Top dressing:** Mulching and top-dressing organic bark mulch.
 - 3.1 **Depth:** 75 mm.

486 Hedgerow Protection

1. **Manufacturer:** Submit guard proposals.
 - 1.1 **Product reference:** Submit proposals.
2. **Type:** Round.



3. **Material:** Plastics mesh.
4. **Size:** 60mm high and 170-200mm diameter for hedgerow.
5. **Colour:** Contractor's choice.
6. **Support:** Caned.
7. **General:** Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

490 Individual mulch mats

1. **Manufacturer:** Submit proposals.
 - 1.1 **Product reference:** Submit proposals.
 - 1.2 **Type/ Size:** Biodegradable flax.
2. **Recycled content:** Submit proposals.
3. **Timing:** Lay after planting.
4. **Watering:** Water soil thoroughly before laying.
5. **Laying:** In close contact with the soil surface. Position pre-slit mats closely around plant stems.
6. **Fixing:** Biodegradable pins.
7. **Overlay:** Planting bed mulch.

Protecting/ maintaining/ making good defects

710 Maintenance

1. **Duration:** Carry out the operations in the following clauses from completion of planting until the end of the rectification period.
2. **Frequency of maintenance visits:** In accordance with the agreed maintenance schedule.

720 Failures of planting

1. **Defects due to materials or workmanship not in accordance with the Contract:** Plants/ trees/ shrubs that have failed to thrive.
 - 1.1 **Exclusions:** Theft or malicious damage after completion.
 - 1.2 **Rectification:** Replace with equivalent plants/ trees/ shrubs.
2. **Replacements:** To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
3. **Timing of making good:** During the next suitable planting season.

740 Cleanliness

1. **Soil and arisings:** Remove from hard surfaces and grassed areas.
2. **General:** Leave the works area in a clean/tidy condition at completion and after any maintenance operations.

750 Planting maintenance generally

1. **Weed control:** Maintain weed free area around each tree and shrub.
 - 1.1 **Diameter (minimum):** The larger of 1 m or the surface of original planting pit.
 - 1.2 **Keep planting beds clear of weeds:** By maintaining full thickness of mulch.



2. **Planted areas:** Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
3. **Precautions:** Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar power tools.
4. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
5. **Tree accessories:** Check condition of stakes.
 - 5.1. **Broken or missing items:** Replace.
 - 5.2. **Loose stakes:** Re-firm in the ground or replace as necessary to provide support to the tree.
 - 5.3. **Ties:** Adjust to accommodate growth and prevent constriction or abrasion.
6. **Watering:** As required for healthy establishment, depending on weather conditions.

760 Hedgerow Maintenance (*Crataegus monogyna*) –Pruning

1. **Description:** Native hedgerows upon the northern boundary comprising *Crataegus monogyna* should not be cut every year, as flower buds often form on second-year growth. Trimming hedges should take place on a three-year rotation, targeting different sections each year, will make sure there are always flowers for pollinators in spring and berries for birds in autumn. Trim 50% one year and the other 50% the following year.
2. **Shape:** Trim to an 'A' shape.
3. **Height:** Maintain to no less than 2m high and maximum of 4m high.
4. **Timing:** January.
5. **General:** Prune to promote healthy growth and natural shape.
 - 5.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 5.2. **Timing:** January.
6. **Arisings:** Remove.

760 Hedgerow Maintenance (*Fagus sylvatica*) –Pruning

1. **Description:** Native hedgerows within the car parking area comprising *Fagus sylvatica* can be cut every year and should be maintained as an amenity hedgerow.
2. **Shape:** Trim to an 'A' shape.
3. **Height:** 1.2m (max).
4. **General:** Prune to promote healthy growth and natural shape.
 - 4.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 4.2. **Timing:** In accordance with the agreed maintenance schedule
5. **Arisings:** Remove.

790 Final mulching

1. **Timing:** At end of the maintenance period.
2. **Watering:** Ensure that soil is thoroughly moistened prior to re-mulching, applying water where necessary.
3. **Planting beds:** Re-mulch.
4. **Depth (minimum):** 75 mm

Ω End of Section



Q35

Landscape maintenance

Generally

105 Maintenance objective A - Wildflower Meadow

1. **Location:** Northern Boundary.
 - 1.1 **Duration:** Ongoing.
2. **Aims:** To develop a diverse wildflower meadow.
3. **Results:** Healthy vigorous sward with a wide range of wildflowers.

106 Maintenance objective B - Existing Tree and Understory Vegetation (Groups G1 and G2)

1. **Location:** Northern Boundary.
 - 1.1 **Duration:** Ongoing.
2. **Aims:** to develop a diverse group of native species, the groups are to contain healthy specimens that allow light permeation to ground level.
3. **Results:** Healthy vegetation groups that provide habitat opportunity and screening of the new building.

107 Maintenance objective C - Hedgerow Planting

1. **Location:** Site Wide.
 - 1.1 **Duration:** Ongoing.
2. **Aims:** to develop a healthy and dense hedgerow network.
3. **Results:**
 1. Healthy intact hedgerow 2-4m high (*Crataegus monogyna*)
 2. Healthy intact hedgerow 1.2m high (*Fagus Sylvatica*)

110 Notice

1. **Give notice before**
 - 1.1 Application of herbicide.
 - 1.2 Application of fertilizer.
 - 1.3 Watering.
 - 1.4 Each site maintenance visit.
2. **Period of notice:** Two days.

130 Reinstatement

1. **Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings:** Reinstatement to original condition.

155 Watering

1. **Supply:** Potable mains water.



2. **Quantity:** Wet to field capacity.
3. **Application:** Do not damage or loosen plants.
4. **Compacted soil:** Loosen or scoop out, to direct water to rootzone.
5. **Frequency:** As necessary for the continued thriving of all planting.

160 Water restrictions

1. **General:** If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

170 Disposal of arisings

1. **General:** Unless specified otherwise, dispose of arisings as follows:
 - 1.1 **Biodegradable arisings:** Remove to recycling facility.
 - 1.2 **Grass cuttings:** Leave for up to 7 days after cutting and then remove (allow wildflowers to drop seed).
 - 1.3 **Tree roots and stumps:** Pile in suitable location on site boundary to create habitat features.
 - 1.4 **Shrub and tree prunings:** Remove to recycling facility.
 - 1.5 **Litter and nonbiodegradable arisings:** Remove from site.

181 Mechanical equipment

1. **General:** Minimize.
2. **Timing:** Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only.

190 Litter

1. **Extraneous rubbish not arising from the contract work:** Collect and remove from site.

195 Protection of existing grass

1. **General:** Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

197 Cleanliness

1. **Soil and arisings:** Remove from hard surfaces.
2. **General:** Leave the works in a clean, tidy condition at completion and after any maintenance operations.

Grassed areas

210 Performance-based maintenance of grassed areas

1. **General:** Maintain grass areas in a manner appropriate to the intended use.
2. **Soil and grass**
 - 2.1 **Condition:** Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - 2.2 **Waterlogging and compaction:** Prevent.
 - 2.3 **Damage:** Repair trampling, abrasion or scalping.



3. **Litter and fallen leaves:** Rake into distinct piles to create habitat features.

220 Grass cutting generally

1. **Before mowing:** Remove litter, rubbish and debris.
2. **Finish:** Neat and even, without surface rutting, compaction or damage to grass.
3. **Edges:** Leave neat and well defined. Neatly trim around obstructions.
4. **Adjoining hard areas:** Sweep clear and remove arisings.
5. **Drought or wet conditions:** Obtain instructions.

225 Tree stems

1. **Precautions:** Do not use mowing machinery closer than 100 mm to tree stems. Use nylon filament rotary cutters and other handheld mechanical tools carefully to avoid damage to bark.

272 Maintaining grassed areas with perennial wildflowers

1. As Q30.

309 Edges to seeded areas

1. **Location:** As drawings.
2. **Timing:** After seeded areas are well established.
3. **Method:** Cut to clean, straight lines or smooth curves. Draw back soil to permit edging.
4. **Arisings:** Remove.

311 Re-forming grass edges

1. **Location:** Where damage occurs.
2. **Method:** Draw back soil and re-form edges to clean, straight lines or smooth-flowing curves, sloping slightly back from vertical.

330 Selective herbicide

1. **Location:** Wildflower Grassland.
2. **Herbicide:** Do not use.
3. **Areas not to be sprayed:** Wildflower grassland areas.

Shrubs/ trees/ hedges

490 Thinning of understory planting

1. Vegetation Group 1 should be selectively thinned to open up light to ground level working from the periphery inward. Reason: to create mosaic habitat with wildflower grassland.

No more than 5% of understory planting should be cleared in any one year. Thinning should not compromise the integrity of the screening attributes of G1 and G2.

2. **Plants to be thinned:** Vegetation Group Number G1
3. **Standard:** BS 7370-4, clause 3.5.17.1.
4. **Timing:** Thin when foliage of adjacent plants has begun to touch.



5. **Roots**
 - 5.1. **Disturbance to adjacent plants:** Minimize.
 - 5.2. **Soil:** Refill holes with topsoil to leave an even-graded surface.
 - 5.3. **Mulch:** Maintain mulch as original specification.
6. **Adjacent plants:** Make good any minor damage immediately.
7. **Plants for retention:** Select plants with a strong healthy habit.
8. **Mature planting density:** To allow light to penetrate to within vegetation group.

500 Establishment of new planting

9. **Duration:** Two years.
10. **Weed control**
 - 10.1. **Method:** Keep planting beds clear of weeds by Maintaining full thickness of mulch.
 - 10.2. **Area:** Maintain a weed-free area around proposed hedgerows.
11. **Soil condition:** Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
12. **Wa tering:** As required to ensure healthy establishment.

510 Hedgerow Stakes

1. **Inspection/ maintenance times:** As scheduled and immediately after strong winds.
2. **Stakes**
 - 2.1. Replace loose, broken or decayed stakes to original specification.
3. **Ties:** Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
 - 3.1. Where chafing has occurred, reposition or replace ties to prevent further chafing.
4. **Removal of stakes and ties:** Two years after planting.
 - 4.1. Fill stake holes with lightly compacted soil.

520 Refirming of trees and shrubs

1. **Timing:** After strong winds, frost heave and other disturbances.
2. **Refirming:** Tread around the base until firmly bedded.
3. **Collars in soil at base of tree stems, created by tree movement:** Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

537 Nesting wild birds

1. **Survey:** Do not undertake management of trees and hedgerow during the period of February to August (inclusive).
2. **Accidental disturbance:** Report immediately.

540 Pruning generally

1. **Pruning:** In accordance with good horticultural and arboricultural practice.
 - 1.1 **Removing branches:** Do not damage or tear the stem or bark.



12. **Wounds:** Keep as small as possible and cut cleanly back to sound wood.
 13. **Cutting:** Make cuts above and sloping away from an outward-facing healthy bud, angled so that water will not collect on cut area.
 14. **Larger branches:** Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
2. **Appearance:** Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
 3. **Tools:** Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
 4. **Disease or infection:** Give notice if detected.
 5. **Growth retardants, fungicide or pruning sealant:** Do not use unless instructed.

545 Pruning of excessive overhang

1. **Timing:** As instructed.
2. **Operations:** Remove growth encroaching onto paths, roads, signs, sightlines and road lighting luminaires.
3. **Special requirements:** None.

550 Pruning of excessive height

1. **Timing:** As instructed.
2. **Operations:** Remove excessive height Above 12 m.

555 Pruning trees and shrubs

1. **Standard:** To BS 7370-4.
2. **Special requirements:** None

605 Trimming slowly establishing hedges

1. **Operations**
 - 1.1 **Timing:** Cut back amenity hedgerows hard in September to encourage bushy growth down to ground level.
 - 1.2 **Form:** Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

620 Removal of dead plant material

1. **Operations:** At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems. Select suitable areas within the wildflower meadow to pile dead and broken wood to develop habitat opportunities.

630 Dead and diseased plants

1. **Removal:** Within one week of notification.
2. **Replacement:** In the next suitable planting season.

650 Hand-weeding

1. **General:** Remove weeds entirely, including roots.



2. **Disturbance:** Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. **Completion:** Rake area to a neat, clean condition.
4. **Mulch:** Reinstate to original depth.

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 50 mm.
2. **Herbicides:** Do not use.

680 Soil aeration

1. **Compacted soil surfaces**
 - 1.1 **Prick up:** To aerate the soil of root areas and break surface crust.
 - 1.2 **Size of lumps:** Reduce to crumb and level off.
 - 1.3 **Damage:** Do not damage plants and their roots.

690 Maintenance of loose mulch

1. **Thickness (minimum):** 75 mm.
 - 1.1 **Top up:** Twice per year.
2. **Mulch spill on adjacent areas:** Remove weeds and rubbish and return to planted area.
3. **Weeding:** Remove weeds growing on or in mulch by Hand-weeding.

693 Maintenance of mulch matting/ sheet mulches

1. **General:** Inspect and reattach or refirm mulch mats and sheet mulches.

Tree work

810 Tree work generally

1. **Identification:** Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
2. **Protection:** As section A34.
3. **Standard:** To BS 3998.
4. **Removing branches:** Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
5. **Appearance:** Leave trees with a well-balanced natural appearance.
6. **Chain saw work:** Operatives must hold a certificate/licence of competence.
7. **Tree work:** To be carried out by an approved member of the Arboricultural Association.

815 Additional work

1. **Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention:** Give notice if detected.

820 Prevention of wound bleeding

1. **Standard:** To BS 3998.



825 Prevention of disease transmission

1. **Standard**: To BS 3998.

830 Cleaning out and deadwooding

1. **Remove**
 - 1.1 Dead, dying or diseased wood, broken branches and stubs.
 - 1.2 Fungal growths and fruiting bodies.
 - 1.3 Rubbish, windblown or accumulated in branch forks.
 - 1.4 Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
 - 1.5 **Climbing plants**: Do not remove unless detrimental to tree health.

835 Cutting and pruning generally

1. **Tools**: Appropriate, well maintained and sharp.
2. **Final pruning cuts**
 - 2.1 **Chainsaws**: Do not use on branches of less than 50 mm diameter.
 - 2.2 **Hand saws**: Form a smooth cut surface.
 - 2.3 **Anvil type secateurs**: Do not use.
3. **Removing branches**: Do not damage or tear the stem.
4. **Wounds**: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
5. **Cutting**: Cut at a fork or at the main stem to avoid stumps wherever possible.
6. **Large branches**: Remove only with prior approval.
 - 6.1 Remove in small sections and lower to ground with ropes and slings.
7. **Dead branches and stubs**: When removing, do not cut into live wood.
8. **Unsafe branches**: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
9. **Disease or fungus**: Give notice if detected. Do not apply fungicide or sealant unless instructed.

840 Crown reduction/ shaping

1. **General**: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
2. **Operations**: As required to reduce overcrowding and allow light to understorey.

845 Crown lifting

1. **Clearances**: Remove branch systems to give clearance.
 - 1.1 **Height**: 2.5 m above footpaths.
3 m above cycleways.
5.5 m above vehicle carriageways.
2. **Removing branches**: Remove whole branches back to the stem or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.



865 Bark damage

1. **Wounds**
 - 1.1 Do not attempt to stop sap bleeding.
 - 1.2 **Bark:** Remove ragged edges using a sharp knife.
 - 1.3 **Wood:** Remove splintered wood from deep wounds.
 - 1.4 **Size:** Keep wounds as small as possible.
2. **Liquid or flux oozing from apparently healthy bark:** Give notice.

870 Cavities in trees

1. **Investigation:** Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay and give notice.
2. **Water-filled cavities:** Do not drain.
3. **Sound wood inside cavities:** Do not remove.
4. **Cavity openings:** Do not cover.

Ω End of Section



Q50 Site/street furniture/equipment

Clauses

100 Bird Boxes

1. 2x Bird Boxes are to be installed on suitable trees within vegetation group G2.
2. **Product:** Schwegler bird house.
3. **Entrance Hole:** 32mm.
4. **Location :** Affixed to south side of Tree no lower than 6m high.

101 Bat Boxes

1. 2x Bat Boxes are to be installed on suitable trees within vegetation group G2.
2. **Product:** 1FD Schwegler Bat Box.
3. **Location :** Fixed to northern side of tree no lower than 6m high.

Ω End of Section



Section 3: Summary and Conclusion

- 3.1. This Biodiversity Enhancement Specification has been produced to satisfy the requirements of Condition 12, providing detailed landscape specifications, implementation of methodologies and management operations for all hedgerows, wildflower areas, bird and bat boxes as well as tree maintenance.
- 3.2. It outlines the following:
- Phasing of landscape works;
 - Landscape implementation of hedgerows, wildflower meadows and bat and bird boxes;
 - Management objectives; and
 - Maintenance operations and timings.
- 3.3. In summary, the details provided in this document show the anticipated sequence of development as required by Condition 12. The details of the landscape typologies concerned with biodiversity enhancement and management are set out herein.

